



H Ford

WWest imp

*Mac Andrewia azorica*



C.H. Ford

W. West imp.

*Myliusia callocyathes*

November 22, 1859.

Dr. Gray, V.P., in the Chair.

Mr. Daniel G. Elliot of New York exhibited three specimens of hybrid Ducks from his own collection, which had been obtained on the south shore of Long Island, U. S. A. One of these was considered to have been produced by a cross between the Wild Duck (*Anas boschas*) and Pintail (*Dafila acuta*), the second by the Wild Duck and Muscovy Duck (*Cairina moschata*), and the third probably by the American Scaup (*Fuligula affinis*) and the Canvas-back (*F. valisneria*) or the American Pochard (*F. americana*).

Dr. Hamilton exhibited three curiously plumaged Pheasants shot in Norfolk, which had the appearance of males on the lower surface and females on the upper. They were birds of the year. Upon careful dissection, no traces of sexual organs, either male or female, were discernible.

The following papers were read :—

1. DESCRIPTION OF MACANDREWIA AND MYLIUSIA, TWO NEW FORMS OF SPONGES. BY DR. J. E. GRAY, F.R.S., V.P.Z.S., P.E.S., ETC.

(Radiata, Pl. XV. XVI.)

In 1841 Mr. Stutchbury described in our Proceedings a Sponge brought from Barbadoes, in the Museum at Bristol, which was peculiar for being entirely formed of agglutinate silicious spicula, forming a tough semitransparent glass-like spongy mass. By exchange I have obtained half the specimen of this most curious and interesting sponge, so that I have the means of comparing those I have described with the one then made known.

In July 1851 Mr. R. MacAndrew kindly presented to the British Museum a Coral from St. Michael's, one of the Azores, which then attracted my attention, but I put it aside in hopes that I might obtain a specimen of it in spirits, which would enable me to understand more completely its history and character. No other specimen having, however, come under my examination, the subject dropped out of my mind.

It was accidentally placed with the Stony Corals, and its hardness and resemblance to the genus *Gemmipora* are some excuse for this mistake. Some time ago Mr. Holdsworth, when studying the corals in the Museum, observed that it evidently did not belong to that group : and a very superficial inspection, indeed its mere lightness, was enough to show that such was the case.

I again placed it aside, thinking that I had seen a figure of the animal as an *Alcyonium* in Messrs. Quoy and Gaimard's 'Voyage,' and in Dana's 'Zoophytes,' and that I would study it when I had

that family under my hands, or leave it for some other person to examine who might take up the group.

Having lately had occasion to consult Messrs. Quoy and Gaimard's work, and the essay of Mr. Dana, I became satisfied that the substance from the Azores could not be the *Aleyonium glaucum* or *Aleyonium latum* (Dana, Zooph. 623. t. 58. f. 6), which I had before thought from recollection might be the case; for these authors describe *A. glaucum* as soft and fleshy, and *A. latum* as "more rigid in its texture than *A. glaucum*." As Mr. MacAndrew's specimen is hard, inflexible, and brittle, though very light, this induced me to examine the specimen more carefully; and I then found that the supposed coral was a silicious sponge, covered below with a thin fleshy envelope without any apparent apertures, and above with a thicker fleshy coat, studded with large-sized, regularly-disposed, circular cells, which look like the cells of the Polypes in the two *Aleyonia* above referred to. The apertures are destitute of a radiating lamina, and appear in their dry state to be subdivided into six or eight small circular tubes, and have all the appearance of being the cells of a pinnated tentacled zoophyte. The small part of the lower surface of the spongy axis, which is exposed, is pierced with minute perforations, and the upper surface is furnished with groups of larger pores, which, as far as I can judge without injuring the specimen, are placed under the cells above described. There are grooves diverging from the small cylindrical perforations in one of the groups to the perforations in the other groups.

I have thought proper to call the genus after the gentleman who discovered it, and who has been very liberal in doing all in his power to extend our knowledge of zoology and geology, and has several times placed his yacht at the command of scientific men, to assist them in their researches.

The genus may be thus defined:—

#### MACANDREWIA.

Cup-shaped, expanded, more or less sinuated or lobed, affixed by a more solid dilated base, covered with a fleshy bark, which is furnished with cells on the upper surface, supported by a very light porous silicious spongy cup-shaped axis, the upper surface of which is furnished with groups of small cylindrical pores placed in roses, and with grooves radiating between each group of pores; the lower surface uniformly porous.

#### MACANDREWIA AZORICA. (Pl. XV.)

*Hab.* St. Michael's, Azores, 1851 (*Robert MacAndrew, Esq., F.R.S., &c.*).

This sponge? has so much the general appearance and habit of a zoophyte with pinnated tentacles like the *Aleyonium* to which I have referred above, that I am as yet by no means certain that it may not be the product of such animals; but I have not been able to find any traces of the remains of them, and therefore must wait the



arrival of some other specimen preserved in spirit to determine the fact. At the same time the bark is unlike that of any sponge that I am acquainted with, the existence of such a bark on any true sponge being as yet unknown to me. On the other hand, the existence of an axis of the spongy texture and the silicious compositions found in this marine body are novelties in the order of zoophytes in which its general appearance would lead one to place it. But that is no reason why it may not prove to be a zoophyte, as the same may be said to be the case with regard to the genus *Hyalonema*, the axis of which is so anomalous that several of the French zoologists—Valenciennes, Milne-Edwards, and others—considered the bark of it as a parasite on some unknown substance, overlooking the fact that the bark is strengthened by fibres exactly like those of which the axis is composed. Such an idea would require a belief in the existence of two bodies always found together, and unknown in any other form, instead of their being regarded as parts of the same animal.

The axis of this body has many characters in common with the body which is called a Sponge described by Mr. Stutchbury in our Proceedings for 1841, p. 87, as mentioned above under the name of *Dactylocalyx pumiceus*, and which has been more lately described under another name by M. Valenciennes, a very fine specimen of which is in my collection; but in this sponge it is the outer surface which is marked "with deep sinuosities radiating from the root to the outer circumference."

We have lately received from Dr. William MacGee of Belfast a very curious specimen of a silicious sponge?, which is also allied to the *Dactylocalyx* and *MacAndrewia*, but so distinct in its form and structure that I am inclined to regard it as a type of a new genus, which may be called

#### MYLIUSIA.

Sponge? silicious, funnel-shaped, fixed by the base; the upper surface smooth, marked with numerous minute perforations placed in nearly parallel grooves radiating from the centre to the circumference, and with numerous large, oblong, rather unequal-sized perforations, which are fringed on the lower side with a high wall of a similar structure to the rest of the sponge; these edges of the cavities causing the under surface to be covered with unequal irregular shaped tubes of nearly the same length, and more or less confluent together: some of these tubes are simple and subcylindrical, others are expanded out and more or less crumpled on the edge around the cavity, so as to end in two, three, or even four, more or less circular mouths.

#### MYLIUSIA CALLOCYATHES. (Pl. XVI.)

*Hab.* West Indies (*Dr. MacGee*).

Dr. Bowerbank informs me that the silicious spicula of this sponge are very different from those of *Dactylocalyx pumiceus*. As he is working on that subject, I leave the peculiarities for him to de-

scribe ; but I should not be in the least surprised if the genera *MacAndrewia*, *Myliusia*, and *Dactylocalyx* should all prove to be a peculiar family of zoophytes rather than sponges. If these bodies are sponges, they will form a family in that group, which may be named *MacAndrewiadæ*, characterized by the peculiar form and structure of the axis, the distinctness of the bark, and the position of the oscules or cells.

The structure of the base of *Dactylocalyx* and of the spicula which are found in the interspaces of the network are figured by Mr. Quekett in his 'Lecture on Histology.'

I have named this genus after Christlob Mylius, who first described the curious zoophyte since called *Umbellularia grænlandica* ; and I think that any one who reads his simple and plain account of the animal in his letter to Haller, and the account of the same animal given by John Ellis in his work on Corallines, will be satisfied that the latter was not very liberal in his praise towards his contemporary. There might have been reasons why he did not mention the name of Mylius, but I cannot conceive why those of Collinson and Dunze should have been omitted.

It is much to be regretted that nothing is known as to what became of the two specimens of this animal described by Mylius and Ellis, and that no other specimen has been found since that period, now more than a century ago.

## 2. ON SOME NEW OR LITTLE-KNOWN BIRDS FROM THE RIO NAPO.

By PHILIP LUTLEY SCLATER, M.A., SECRETARY TO THE SOCIETY.

Among some birds lately received from the Rio Napo, and kindly submitted to my inspection by M. Verreaux of Paris, are several species not included in the series from the same locality which I had the pleasure of bringing before the notice of the Society last year \*. To these I now beg leave to call the Society's attention, some of them appearing to be new to science, and others, although already described, to be of rare occurrence.

1. *BASILEUTERUS NIGRI-CRISTATUS* (Lafr.).—*Myiothiolyptis nigri-cristata*, Bp. Consp. p. 311.

2. *DIGLOSSA ATERRIMA*, Lafr. Rev. Zool. 1846. p. 319.

3. *CALLISTE RUFIGULARIS*, Sclater, Mon. Call. pl. 13.

The occurrence of this species on the eastern side of the Andes is certainly singular, as M. Bourcier obtained his specimens at Calacali, on the western side of the great range.

4. *CALLISTE CHRYSOTIS*, DuBus ; Sclater, Mon. Call. pl. 43.

\* See P. Z. S. 1858, p. 59.